

UPDATED: 5/5/97

## **BEST MANAGEMENT PRACTICES FOR PRINT SHOPS AND SILK SCREEN SHOPS**

Best management practices can be thought of as using "good housekeeping" practices. Listed below are several procedures to operate your facility and minimize risk of contamination to the environment.

### **Solvents**

1. Inks, solvents, spent solvents and solvent mixtures are hazardous materials and must properly be disposed of by an approved hazardous waste hauler, recycled by a permitted recycler or distilled and recycled using a solvent recovery unit at your facility. Inks may contain hazardous solvents such as xylene, ketones and alcohols. Cleaning solvents may include methanol, toluene, naphtha, trichloroethane and methylene chloride.
  - a. In all cases where a hazardous waste is produced, a permitted hazardous waste transporter must be used to transport the waste to a federally approved hazardous waste disposal or treatment facility. Hazardous waste manifests must be kept at your facility, available for review. The facility generating the hazardous waste is required to obtain an Environmental Protection Agency identification number unless classified as a conditionally exempt generator by contacting:

Notification Coordinator  
Bureau of Waste Planning and Regulation  
Florida Dept. of Environmental Protection  
Twin Towers Office Building, Room 471  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
(904) 488-4805

- b. If the waste solvent is recycled by the facility generating the waste, the solvent stillbottoms from the reclaiming operation must be collected and handled as hazardous, unless proven otherwise.
    - c. If the waste solvent is recycled by a permitted solvent recycler, receipts must be obtained from the recycler and copies kept at your facility.

### **Waste disposal**

1. Rags used during equipment repairs or cleaning processes which become contaminated with oil or hazardous materials such as solvents, ink, etc. are considered hazardous wastes and may be handled by an approved rag service or an approved hazardous waste transporter. Used rags must not be disposed of in the trash/dumpster unless a hazardous waste profile indicates otherwise and approval is granted by this department. In order to minimize the amount of solvent and ink on rags, excess ink should be removed with a scraper or spatula before wiping with shop towel. Unused ink can be placed back in the original container.
2. Waste printing solutions and sludges must be disposed of as hazardous waste. Waste ink may be recycled or must be disposed via hazardous waste hauler.
3. Sawdust or other absorbent material used to collect spills must be disposed of properly. If the material being cleaned up with the absorbent is a hazardous waste, the absorbent must also be disposed of as a hazardous waste.
4. Empty ink cans may be placed in the dumpster and disposed of in a local sanitary landfill only by first removing any remaining product, and triple rinsing the container. The rinsewater must be collected and disposed of with the hazardous waste. Additionally, cans may be wiped clean with a rag after all excess is removed. The rags must be properly disposed off. Empty solvent containers may be disposed of by punching holes in the empty container and placing in the dumpster. These containers must be completely empty before disposal.
5. Wastewater from printing press rollers or silk screens can be discharged to sanitary sewers only if sewer standards are met. In areas served by septic tank this wastewater must be disposed via a hazardous waste hauler.
6. Receipts for the disposal of waste and/or wastewater must be maintained on site for a period of no less than 3 years and available for inspection.
7. Hazardous waste manifests must be kept for any hazardous waste disposal.
8. All waste drums/containers must be properly labeled. If waste is hazardous it must be labeled with the words "hazardous waste", name of waste, type of hazard and accumulation date if applicable.

Stormdrains

1. Special attention should be paid to storm drain locations. Storm drains are designed to help alleviate rainwater. These drains are not connected to the sanitary sewer system, but rather discharge to the ground and groundwater. Therefore, no discharges other than rainwater, are to go to these storm drains. These areas should be kept free of all contaminants to prevent spillages into these drains.

## Storage

For storing large amounts of chemicals and/or fuels:

1. All chemicals and fuel storage areas must be contained within an impervious bermed or walled area capable of containing 110% of the volume of the largest single storage tank within the secondary containment area.

In large storage areas, there must be aisle space between storage products. This will enable inspection of the container for leaks and/or corrosion. Incompatible chemicals or materials should be stored separately.

\*\*\*For facilities with photochemical processing equipment\*\*\*

1. Film processing waste solutions may be disposed of to sanitary sewer after silver recovery has taken place, if sewer standards are met. If not served by sanitary sewers, film processing solutions must be collected and disposed of by an approved hauler. This waste cannot be discharged to septic tank, with or without pretreatment.
2. Slide processing using ferricyanide (or other cyanide based products) bleach requires pretreatment of the slide processing wastewater prior to discharged to sanitary sewers. This wastewater may not be discharged to sanitary sewer without pretreatment. This waste cannot be discharged to septic tank, with or without pretreatment.
3. Silver recovery units must be used. These units will remove silver from waste processing solutions. Silver is classified as a toxic metal by EPA and as such must not be discharged to sanitary sewers in excess of allowable limits. This waste cannot be discharged to a septic tank, with or without silver recovery.
  - a. Several types of silver recovery units exist. The most common are electrolytic, metallic replacement and ion exchange units. They may be used separately or in combination however the electrolytic unit alone will not suffice. Equipment maintenance is very important in order to insure that they unit is working properly.

All print, silkscreen and/or photographic processing facilities are required to have an Annual Pollution Control Operating Permit.

Questions will be answered by the Industrial Facilities Section at 372-6600.